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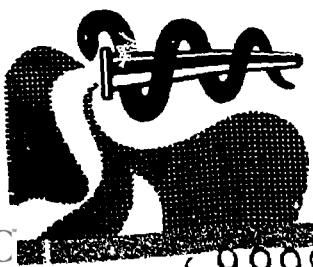
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ABSTRACT

The syllabus, part of the New York Health Occupations Education Program, is a statement of the minimum course content acceptable for State credit, requiring two and one-half hours each day of 160 teaching days in each of two academic years. The Introduction to the syllabus contains recommendations regarding selection of teachers and students, suggests ancillary studies, and explains that the syllabus is not intended to be used as course of study. Rather, the contents of the syllabus are to be incorporated in a course of study developed by the teacher to emphasize local needs and conditions. Topics considered in the syllabus are: general orientation, the dental assistant, dental terminology, oral anatomy, diet and nutrition, preventive dentistry, dental instruments and equipment, dental materials and methodology, laboratory procedures, chairside assisting, pharmacology, radiology, oral pathology, microbiology and sterilization, office management, office first-aid, and preparation for employment. A three-column format is used. The first column presents minimal acceptable content; the second states instructional objectives in terms of desired student performance; the third contains teaching suggestions. A course of study based on the syllabus should contain performance objectives defining what the student can do, under what conditions, and at what level of proficiency. (AG)

HEALTH OCCUPATIONS EDUCATION PROGRAM

CE



DENTAL ASSISTING

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The University of the State of New York / THE STATE EDUCATION DEPARTMENT
Bureau of Secondary Curriculum Development / Albany, New York 12224/1973

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HEALTH OCCUPATIONS EDUCATION PROGRAM

SYLLABUS *in*

DENTAL ASSISTING

The University of the State of New York/The State Education Department
Bureau of Secondary Curriculum Development/Albany, New York 12224/1973

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Ruth-Ellen Ostler

FOREWORD

The ever-increasing demand for dental services has produced a subsequent demand from dental practitioners for personnel trained to expedite treatment of patients through efficient assisting at chairside, and in other day-to-day procedures in the dental office and clinic.

In response, an advisory committee was convened to set objectives and parameters for instruction in dental assisting. In July 1972, Joseph J. Messier, Associate in Vocational Curriculum and Ina E. Conley, Associate, Bureau of Health Occupations Education, met with these advisors:

Marjorie Barscz, Coordinator, Health Occupations Program, Herkimer BOCES

Donna Creighton, Teacher, Dental Assisting, Onondaga BOCES

Dorothy Fisk, Coordinator, Health Occupations Program, Oswego BOCES

Janet Waagen, Teacher, Dental Assisting, Suffolk BOCES #3

Dominick Eanello, Assistant Dean of Science Programs, Hudson Valley Community College

Richard Damiano, D.D.S., Advisor to Dental Programs, Onondaga BOCES and Onondaga Community College

In August 1973, a writing team composed of Mrs. Creighton, Mrs. Waagen, and Lynda Kearns, teacher of Dental Assisting, We-Mo-Co BOCES, discussed with Miss Conley and Mr. Messier, the detailing and refining of the basic course content outlined by the advisory committee, and then worked closely with Mr. Messier, the project supervisor, to create objectives and to develop resource lists, teaching suggestions, and instructions for using this syllabus in Dental Assisting.

G. Earl Hay, Supervisor
Vocational Curriculum Unit
Bureau of Secondary Curriculum Development

Gordon E. Van Hooft, Director
Division of Curriculum Development

MESSAGE TO TEACHERS AND ADMINISTRATORS

The Health Occupations Education Syllabus in Dental Assisting is a statement of the minimum course content acceptable for State credit. A local course of study based upon this syllabus should require 2½ hours each day of 160 teaching days, in each of 2 academic years. A program of supervised work experience in the dental office or clinic should be an integral part of the second year of instruction. Where offered, a foundations or core course in Health Occupations Education may be substituted for the broad-base health occupations instruction of the Dental Assisting Program. Local courses meeting these standards of content and instructional time may grant two credits per year, for a Group II sequence of four credits, as provided in *The Secondary School Curriculum of New York State: A Handbook for Administrators*.

The paramount objective of instruction in Dental Assisting is that of all occupational education — graduate employability. Only students evidencing possession of at least minimum personal abilities necessary to successful employment should be scheduled for instruction in this program. Capable students must not, however, be deprived of academic studies required for admission to postsecondary programs leading to licensing or certification in other branches of dental health services, should the students so aspire.

The Introduction to this syllabus contains recommendations regarding selection of teachers and students, suggests ancillary studies, and explains the use of the syllabus in developing a locally effective course of study. Every director of occupational education, supervisor of occupational instruction, and coordinator of a Health Occupations Education program should be familiar with the contents. Every teacher of Dental Assisting should have a personal copy, and every guidance office scheduling students for programs of occupational education should have a reference copy.

The fine contribution of the advisory committee members and the teacher-writers in making this program syllabus a reality is deeply appreciated. Their enthusiasm for the program, expertise in the field, and sincere effort in developing the contents in cooperation with Department personnel have made this a very practical document for local use.

Ruth-Elleen Ostler, Chief
Bureau of Health Occupations Education

Robert H. Bielefeld, Director
Division of Occupational Education Instruction

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INTRODUCTION

This publication is the product of the combined knowledge and experience of dental health practitioners, dental health educators, related health occupations educators, and occupational education curriculum developers. Its content should, then, be of considerable assistance to established as well as to new programs, and to experienced teachers as well as to novices. This introductory section is provided to aid teachers, counselors, and administrators in effective use of the syllabus.

THE TEACHER

The teacher of a course in Dental Assisting should be, first of all, an experienced dental assistant. It is highly recommended that the occupational experience include service in an office employing more than one dental assistant. While the dental hygienist who has worked as a dental assistant should prove qualified to teach the course, employment of a hygienist who lacks this job experience is not encouraged. The dental hygienist is a distinct specialist whose functions do not provide certain knowledge, skills, and experience required of a dental assistant, and necessary to successful teaching of Dental Assisting.

THE STUDENT

Preparing the student for employment as a dental assistant is the *raison d'être* of this course. A valid secondary objective is to provide entry-level dental assistant education to students wishing to enter post-secondary study for certification or licensing in other dental occupations.

Employment in this field requires the possession of certain inherent physical, mental, and emotional attributes in addition to the skills and knowledge developed by instruction. To prevent the waste of funds, class space, teacher effort, and student effort — and above all, to spare the student probable disappointment — educators must carefully evaluate the probable employability of prospective students of this course. It is no service to the student to schedule for a course in Dental Assisting, one who:

Has health problems which prevent normal mobility, or standing or sitting for long periods of time

Has allergies which would adversely affect working with people

Is uncontrollably overweight, to the point where maneuverability in close quarters is adversely affected

Lacks a high degree of digital dexterity

Lacks normal vision (corrected) in either eye
Cannot hear (corrected) conversation of normal intensity, through at least one ear
Has serious speech problems
Has a history of emotional instability, or antisocial behavior
Cannot achieve a grade of "medium," or better, on the General Aptitude Tests
administered by the New York State Department of Labor

It is recommended that a class group contain no more than 20 well-qualified students per teacher.

CONCURRENT OR PREVIOUS STUDY

The schedule of a student who expresses the desire to enter postsecondary education in the dental field, should be arranged to allow completion of necessary course work in biology, chemistry, and mathematics. The home-school schedule should provide a course in basic typing and, where available, the Business Education course in Recordkeeping should be part of the educational program of every student of Dental Assisting. In areas where dental offices and clinics are not readily accessible through public transportation, driver education should be available to students of Dental Assisting. Remedial instruction should be provided to students entering the course, who do not possess at least tenth grade communication skills.

THE SYLLABUS

This syllabus is not intended to be used as a course of study. While organized in a logical progression, the content is not in a teaching sequence. The teacher of Dental Assisting must develop a course of study which covers the content required by the syllabus, in a sequence which emphasizes local needs and conditions, and reflects the teacher's own personality and selected methodology.

A 3-column format was adopted for the syllabus, for clarity and simplicity of use. Resources recommended by the teacher-writers, and a source directory were appended.

The first column of the syllabus lists the minimum acceptable content, instruction in which should require approximately 80 percent of the course time, thus allowing addition of content and increased emphases selected to meet local needs.

The second column contains instructional objectives stated in terms of desired student performance --- a recommended form which simplifies and improves both planning and evaluation. Two styles of objectives are used:

1. "The student should be able to:" defines the skills and knowledge which the student should be able to demonstrate after instruction, which are considered necessary to entry-level proficiency.
2. "The student should be:" sets forth instruction in areas which are nice to know or helpful in achieving student understandings. Objectives in the affective domain of student attitudes are also written in this style due to the subjective nature of teacher evaluation of this student performance.

Both styles are written in the general terms appropriate to a syllabus. They must be rewritten in expanded detail when part of the teacher's course of study, to more specifically define the skills and knowledge necessary to employment.

The third column contains suggestions for teaching which should help the experienced dental assistant, who is a novice teacher, to prepare the lessons, and should remind the experienced teacher of the course that certain parts of the content which seem to go without saying must be fully covered for benefit of the as yet far from experienced students. Included in this column are some "tricks of the trade" developed through the experiences of the highly competent teacher-writers of this syllabus which all teachers may find helpful per se, and which should also serve to stimulate each teacher's own ingenuity and resourcefulness.

The appendix lists nearly two dozen books and periodicals which have proven value to teachers of this course. Several film catalogs and specific audiovisual aids are also mentioned. This list is neither exclusive nor static. It is intended to be only one of the many sources of information regarding texts, references, and audiovisuals to which the teacher should be constantly attuned. Addresses of suppliers are included for the teacher's convenience.

THE COURSE OF STUDY

A local educational agency which wishes to grant State credit for a course in Dental Assisting must keep on file a course of study based on this syllabus, prepared by the teacher(s) of the course, or --- where reason for departure exists --- submit copy of a nonconforming course of study to the Bureau of Secondary Curriculum Development, for evaluation toward approval. The course of study --- whether nonconforming or based on the syllabus --- should be developed in cooperation with the local advisory committee.

The teacher, preparing to write a course of study, should first become familiar with the syllabus' content column, adding any items needed for local effectiveness. The next step should be the realigning of content items into a teaching progression. In certain circumstances, with a class group demonstrating appropriate characteristics, the first lesson may coincide with the first content item of the syllabus, a discussion of "Career Ladders" in "General Orientation." Where a well-equipped facility already exists, and students are activity oriented, the

first lesson may be "Identification of Dental Instruments and Equipment" — or any other unit of content which seems most effective. The units of content of the syllabus need not remain instructional entities, that is, "General Orientation," for example, need not be taught in a succession of lessons on this topic exclusively. This content may, instead, be reduced to basic components which can then be incorporated into a lesson on content of probably greater interest to the student. For example, one of the duties of the dental assistant is that of patient educator. This duty may be presented in a lesson on "Diet and Nutrition," or on "Preventive Dentistry," or on "Oral Anatomy" rather than as part of a, perhaps, less interesting lesson on the dental assistant's duties. Only one major topic of content should be completed before attention is given to stating the objectives of the instruction.

It is strongly recommended that course objectives, like the syllabus objectives, be student oriented. A method of development which may be useful is to use the generalized objective of the syllabus as a base, writing as many truly *performance* objectives as are necessary to adequately define exactly *what the student can do, under what conditions, and to what level of proficiency* as a result of the instruction. In the section on Laboratory Procedures, for example, is instruction in "Mixing; Plasters and Stones." The syllabus objective states that, "*The student should be able to*: Produce plaster or stone models which are free of air bubbles..." When developing this unit for the local course of study, the teacher will need to write several additional, more specific objectives defining this skill, such as:

The student should be able to:

Describe the difference in materials used for plaster models and for stone models.

Clearly state the uses to which each material is put.

Describe (orally, or in writing) the approved procedures in preparing gypsum materials.

Describe (orally, or in writing) the approved procedure in pouring.

List all standard factors which influence the setting time of gypsum products.

Development of a distinct unit of instruction, with its own specific objectives, regarding sizes, types, and operation of mixing equipment, would also be necessary before the teacher would write the culminating objective of this instruction:

The student should be able to:

Produce plaster or stone models which are free of air bubbles, and meet minimum field standards of quality.

Completion of objectives for each unit of content will produce an acceptably complete course of study, but addition of a third column containing miscellaneous notations regarding use of audiovisuals, identification of

ferences, and points of emphasis, will be of considerable assistance to the individual teacher engaged in development of lesson plans. A segment of a teacher's course of study, organized as suggested, would approximate the following example:

o ORAL ANATOMY

- Dental

. Structure of teeth

Parts

Composition

The student should be able to:

Draw the cross section of an incisor, all parts in correct proportion.

Identify by correctly labelling, all parts of the tooth --- no errors.

Describe in writing, the function of each part of the tooth --- no errors.

Identify those parts which are

- a) Organic or inorganic
- b) Regenerative or nonregenerative

ADA charts

Columbia Dentoforms

3M transparencies

Bisected tooth and microscope

Percentage of inorganic
Necessary, or merely
nice to know?

A local course of study developed in this manner serves not only to state the breadth of instruction but also the depth, to clearly define what the instruction is expected to accomplish, and to provide a built-in gauge for evaluation of both the instruction and the instructed.

DENTAL ASSISTING

CONTENT

OBJECTIVES

TEACHING SUGGESTIONS

o GENERAL ORIENTATION

- Dental Health Team
 - . Career ladders
 - Dentist
 - Dental hygienist
 - Dental laboratory technician
 - Dental assistant
 - . Requirements
 - Education
 - Secondary level
 - Postsecondary
 - Certification or licensing
 - Duties, Responsibilities, and Remuneration
 - . Professionals
 - . Technicians
 - . Assistants

The student should be able to:
Identify the various levels of the dental health team by describing their educational requirements, duties, legal responsibilities, and, where applicable, licensing or certification requirements.

The student should be:

Acquainted with the position of dental careers in the total health career field.

Aware of the comparative compensation accorded the various levels of the dental health team.

It is very important that good visual aids be used in teaching about the career ladder relationships, lecture/discussion alone rarely being effective. Observation of various dental health personnel through visits to the field, and corresponding use of practitioner-consultants in the school are notably effective methods.

Some teacher-designated student activity should follow this instruction. (Reading assignments, while useful, are not considered to be an "activity.")

o THE DENTAL ASSISTANT

- Job Requirements
 - . Duties and responsibilities
 - Chairside assistant
 - Laboratory assistant
 - Office manager
 - Patient educator
 - . Employment conditions
 - Hours
 - Wages
 - Benefits
 - Environment

The student should be able to:

Demonstrate, by any teacher-selected means, an ability to differentiate among the various aspects of the dental assistant's duties and responsibilities.

The student should be:

Aware that employment conditions depend upon the employer, the geographical location, and current economic conditions.

The student's knowledge of this area should be tested as it is required knowledge.

Emphasize that conditions of employment are negotiable; that the dental assistant should secure agreeable conditions before accepting employment.

- Personal qualifications
 - Appearance
 - Physical competence
 - Education
 - Temperament
- Interpersonal Relations
 - Professionals
 - Employer
 - Other dental practitioners
 - Physicians
 - Patients
 - Peers
 - Other assistants
 - Technicians
 - Nonpatients
 - Patient related
 - Business related

The student should be able to:
 Demonstrate, by day-to-day appearance, a knowledge of and conformance to the standards of the profession.

The N.Y.S. Department of Labor's General Aptitude Test should be administered before entry into this program. A score of medium should be the minimum accepted.

Perform all skills required of a dental assistant, to standards of general dental practice.

A progressive record of daily grading of the student's appearance should be kept.

Demonstrate a day-to-day temperament which would not adversely affect employability.

Student awareness of this continuous evaluation has considerable motivational value.

Demonstrate desirable interpersonal relations with the variety of persons with whom a dental assistant is in contact.

Student grades must include evaluation of the student's work attitudes, since this is completely relevant to future ability to obtain, and to maintain, employment.

◦ DENTAL TERMINOLOGY

- Word Structure
 - Roots and stems
 - Prefixes and suffixes
- Dental Specialist Titles
 - General
- Basic Dental Equipment
 - Fixed
 - Small movable
- Colloquial Equivalents

The student should be:

Acquainted with the manner in which words are constructed through attaching prefixes and suffixes to roots and stems.

The student should be able to:

Define, and properly use, all terms commonly used in the field of dentistry.

Emphasize the need for use of dental terminology between the dental assistant and the dental staff, and of lay language between the dental assistant and patients.

Spell and pronounce all common dental terms.

Demonstrate, by any teacher-designated means, an ability to convert dental terminology to lay terms.

- Dental
 - . Structure of teeth
 - Parts
 - Function
 - Composition
 - Dentition
 - Primary
 - Permanent
- . Identification
 - Function
- . Eruption dates
- . Surfaces of each tooth
- Supportive Tissues
 - . Bones
 - Identification
 - Face
 - Cranium
 - Structure
 - Function
 - . Muscles of mastication
 - . Salivary glands

The student should be able to:

Label the parts of the teeth as shown on a teacher-supplied diagram, and describe the functions thereof.

Demonstrate, by any teacher-designated means, an ability to identify teeth as either primary or permanent.

Identify by name, each tooth, both primary and permanent, and describe the particular functions of each.

List from memory the average eruption dates of the teeth.

Identify, by name and location, each surface of the tooth, and write the standard abbreviation.

Identify by name and function, each of the facial bones.

Describe the shape and structure of each of the facial bones.

Locate, identify by name, and describe, the functions of the muscles of mastication.

Identify, locate, and describe the functions of the salivary glands.

The depth and breadth of instruction in embryology and histology must be determined by the individual teacher.

Use of charts, large mockups, and live models is especially effective.

Instruction should include the usual symptoms of imminent eruption and exfoliation.

Emphasize "landmarks."

- Trigeminal nerve

The student should be able to:
Describe the function, location, and importance of the trigeminal nerve.

Emphasize the relationship of the trigeminal nerve to anesthesia.

- Soft tissues

locate, identify, and describe the functions of all soft tissues of the oral cavity.

The depth and breadth of instruction in the soft tissues must be determined by the teacher.

◦ DIET AND NUTRITION

— Required Nutrients

- Carbohydrates
- Proteins
- Fats
- Minerals
- Vitamins

Name the four food groups and describe the nutrients which each provides.

Require each student to maintain a short-term record of her own diet.

— Food Chemistry

- Digestion
- Metabolism
- Calories

The student should be:
Aware that digestion begins in the mouth.

The extent of instruction in food chemistry is the teacher's decision.

Acquainted with the basic metabolic pattern.

Audiovisuals are available from a variety of commercial sources.

— Dental Significance

- Diet deficiencies
- Excessive carbohydrate intake
- Detergent foods

The student should be able to:
Describe the apparent symptoms of diet deficiencies.

Describe the role of carbohydrates in the etiology of tooth decay.

An effective method is to immerse an extracted tooth in a liquid carbohydrate.

Compose a representative list of foods which, when masticated, clean the teeth and stimulate the gums.

PREVENTIVE DENTISTRY

- Unfavorable Conditions
 - . Controllable
 - Plaque formation
 - Stains
 - Mucinous films
 - Materia Alba
 - Calculus
 - . Noncontrollable
 - Oral bacteria count
 - Saliva pH
- Controls
 - . Effective
 - Dental floss
 - Marginal
 - Fluorides
 - . Oral irrigation
 - . Brushing
 - Types
 - Techniques
 - . Ineffective
 - Toothpastes
 - Mouthwashes

The student should be able to:

Identify unfavorable conditions of the oral cavity and their relationships to caries and periodontal disease.

Differentiate between controllable and noncontrollable factors.

- List the current means of controlling unfavorable conditions and rank their comparative effectiveness.

Demonstrate the approved method of using dental floss and toothbrush.

Many dentists believe that the correct use of dental floss at least once each 24 hours, is the only really effective caries preventative.

Use of oral irrigation devices by the layman can be counterproductive, and is discouraged by some dentists.

DENTAL INSTRUMENTS AND EQUIPMENT

- Identification
 - . Prosthetic
 - . Orthodontic
 - . Surgical
 - . Endodontic
 - . Periodontic
 - . General
- Description
 - . Hand or rotary
 - . Shapes and sizes
 - . Single or double ended

Name any teacher-selected dental instrument.

Select, from a representative sample group, any dental instrument which the teacher may name.

Describe the use and function of any teacher-specified instrument.

The teacher should be prepared to instruct on the broad spectrum of dental instruments, including those variations which have been outside her own experience.

Where the educational program includes a course in commercial art, a large-scale mockup of the dental tray, and flash-card instruments which can be infinitely rearranged, make an effective aid.

- Operation
- Routine Maintenance
 - . Cleaning
 - . Sterilizing
 - . Sharpening
 - . Lubricating
- Storage
 - . Protection
 - . Efficient retrieval
- Safety
 - . X-ray
 - . Sterilization equipment
 - . Laboratory equipment
 - . Small instruments

The student should be able to:
 Demonstrate proper care and maintenance of all dental instruments and equipment.

Demonstrate, by day-to-day behavior, conformity to all safety rules, regulations, and procedures.

Each student should be required to pass a written safety examination before being allowed to work with hazardous instruments and equipment. The dated and signed test paper should be completely in the student's handwriting and maintained in the teacher's student files.

o DENTAL MATERIALS

- Classification
- Properties and Uses
 - Mixing Techniques
 - . Setting times
 - Storage
 - . Efficiency
 - . Shelf life

List the categories of dental materials and the substances, by brand name, in each category.

Describe the important physical properties and the use of each material.

Demonstrate, by both performance and by written examination, a knowledge of approved mixing techniques, and an ability to achieve a proper mix.

Emphasize the importance of reading manufacturer's instructions even on familiar materials, since small but important changes in product and prescribed procedure are frequently made.

Maintaining supply
Inventory
Ordering

The student should be able to:
Demonstrate an ability to maintain
an efficient storage system.

An inventory card file should be
maintained as both an instruc-
tional and a course management
device.

The different rates of use ---
school, clinic, dental office ---
should be emphasized.

DENTAL METHODOLOGY

— Classification of Caries

List the classes of caries.

Identify examples of the classes
according to location and
treatment.

— Methods of Charting

Chart, by any recognized method,
the dental conditions present in
an oral cavity.

All charting methods should be
taught, since the method a
particular dentist prefers cannot
be predicted.

— Tooth Forms

- Sketching
- Carving models

Sketch and carve each permanent
tooth in proper proportion,
showing the individual landmarks.

The depth of instruction in
carving is currently at the
teacher's discretion. Should
change in the law allow the
dental assistant to carve amalgam
or place restoration materials,
carving will become required
instruction.

LABORATORY PROCEDURES

— Mixing

- Plasters

- Stones

— Models and Dies

- Pouring

- Trimming

Produce plaster or stone models
which are free of air bubbles,
and are trimmed to field standards
of quality.

Emphasize the extreme importance
of accuracy in pouring and
trimming models.

- Base Plate Construction
- Custom Trays
- Simple Denture Repairs
- Temporary Splint Construction

The student should be:

Acquainted with custom trays, base-plate and temporary splint construction, and simple denture repairs.

CHAIRSIDE ASSISTING

- Patient in Chair
- . Positioning

Aware of the anatomical points to be considered in adjusting the dental chair.

The student should be able to:

Make all adjustments in chair mechanisms necessary to position the patient for the work to be done.

Seat the patient comfortably in either a conventional or a contour chair.

. Draping

Drape the patient with the degree of protective covering needed for the procedure to be performed.

Draping should be done while facing the patient whenever possible.

Hands should be dried in view of the patient.

- Instruments
- . Setups

Prepare instrument setups in order of use for standard dental procedures, both general and specialty practices.

- . Passing
- . Receiving

Demonstrate smooth passing of dental instruments to and from the operator's hand, using pen, reverse pen, palm, and palm thrust grasp.

The trend in dentistry is toward increased use of tray setups and color coding, especially in conjunction with oral surgery and four-handed dentistry.

Practitioners will have firm preferences regarding passing of double-ended instruments.

Students should be prepared to use cavity classification as an indication of which end to extend, until the particular dentist's preference is known

Oral Evacuation

The student should be able to:

Select the evacuator tip proper to the dental procedure.

Position the evacuator in the oral cavity.

Remove accumulations from the oral cavity without interfering with the dentist.

- Assisting the Dentist
 - . General dentistry
 - . Prosthetic dentistry
 - Crown and bridge prosthetics
 - Partial dentures
 - Full dentures
 - . Oral surgery
 - . Periodontia
 - . Endodontia
 - . Pedodontia

Instruction should include use of the evacuator to retrieve cotton rolls. The student should be cautioned against moving the evacuator too far into the oral cavity, where its function will approximate that of the stomach pump.

The student should be:

Acquainted with the dental assistant's chairside role in those procedures which are exclusively specialty practice in nature.

Instruction should include familiarization with specialty practice procedures, but the student need not be required to demonstrate proficiency in their performance.

The student should be able to:

Instruct the patient in diet and home care, and demonstrate for the patient the proper techniques of oral care.

In many areas of the State dentists are employing an assistant for the sole duty of patient educating.

- Expanded Duties*

- . Applying topical anesthetic
- . Placing and removing rubber dam
- . Placing and removing temporary restorations
- . Placing, carving, and finishing amalgam restorations
- . Placing and finishing resin composite and silicate
- . Placing and removing matrices
- . Polishing coronal surfaces
- . Taking impressions
- . Removing sutures and dressings
- . Performing preliminary oral examinations (NOT diagnostic)

The student should be:

Acquainted with the performance of the listed procedures.

*Performance of these "expanded duties" by the dental assistant depends upon changes being made in extant law to reflect recommendations of the American Dental Association.

o PHARMACOLOGY

- Classes of Drugs
 - . Anesthetics
 - General
 - Local
 - . Analgesics
 - . Antibiotics
 - . Stimulants
 - . Depressants
 - Narcotics
- Effects of Drugs
 - . Normal
 - . Abnormal

- Methods of Administering

The student should be able to:
List by trade name and classify the drugs commonly used in dentistry.

Describe the uses of any teacher-designated drug common to dental practice.

Describe symptoms of abnormal reaction to any teacher-designated drug common to dental practice.

List the various methods by which any teacher-designated drug may be administered, and state the most effective and the most commonly used method.

Describe in detail the instruments, procedures, and precautions necessary to each method of administering a drug.

It is imperative that the student know the effects of vasoconstrictors in local anesthetics, and be familiar with preoperative and post-operative responsibilities of the dental assistant.

Emphasize security precautions relevant to drugs and syringes, in both school and employment settings.

- Prescriptions
 - . Writing

Name the components of the prescription, and describe the information required in each.

Complete those parts of a sample prescription which the Dental Assistant may legally prepare, using teacher-supplied information.

- . Law

Describe in everyday language the legal aspects of the prescription, and of the responsibilities of the dentist and dental assistant in writing prescriptions.

Principles

- . Theory
- . Mechanics
- . Beams
- . Hazards

The student should be:

Acquainted with the nature of X-rays and with their properties, both beneficial and hazardous.

Acquainted with the basic mechanics of producing X-rays.

The student should be able to:

- Operation
 - . Equipment nomenclature
 - . Techniques and methods
 - Bisecting angle
 - Long cone

Identification on visual aids is good practice preceding use of actual equipment or in the absence of specific types.

Demonstrate ability to set exposure time and KVP and MA.

Position the patient according to the area to be photographed.

Properly center film in the oral cavity.

Secure the film in position through the patient's assistance, or use of a mechanical device.

Center the primary beam vertically and horizontally, by any approved method.

Produce clear and accurate images on the film.

Instruction in theory and mechanics of X-ray production should be limited to that which is necessary for student understanding of successful equipment operation, and of its inherent hazards.

Caution! Avoid overdependence on the "average angle" method.

-- Film Processing

- . Types and sizes

The student should be:

Aware of the existence of different types and sizes of film, each intended for specific diagnostic purposes.

Acquainted with the manufacturers' designations for those sizes and types commonly used in dental practice.

Acquainted with the chemistry of X-ray film development and fixing.

- . Developing and fixing

The student should be able to:

Develop and fix X-ray film by the time/temperature method.

- . Mounting

The student should be:

Acquainted with the various types and sizes of film mountings.

The student should be able to:

Mount film for labial and lingual views.

o ORAL PATHOLOGY

-- Disease of Hard Tissues

- . Dental caries
- . Pulpitis
- . Periapical abscess
- . Osteomyelitis

Describe the etiology of dental caries.

Describe the progression from caries to osteomyelitis.

Knowledge of this aspect of dental health is within the responsibilities of the patient educator.

Diseases of Soft Tissues

- . Tumors and cysts
- . Dilantin therapy
- . Herpes simplex
- . Leukoplakia
- . Syphilitic lesions
- . Aphthous ulcers
- . Lichen Planus

— Periodontal Diseases

- . Gingivitis
- . Periodontitis
- . Periodontosis
- . Periodontal abscess
- . Vincent's infection

— Systemic Diseases

- . Epilepsy
- . Diabetes
- . Heart disease
- . Leukemia

— Developmental Anomalies

- . Hutchinson's teeth
- . Mottled enamel
- . Enamel hypoplasia
- . Supernumerary teeth
- . Anodontia
- . Harelip and cleft palate

The student should be:

Aware of causative factors, signs, symptoms, and treatment of common oral lesions.

At present the dental assistant need only recognize the existence of an abnormality. Future responsibilities may require recognition of the specific abnormality.

The student should be able to:

Describe the etiology of periodontal diseases.

Knowledge of periodontal diseases is necessary to the function of the patient educator.

The student should be:

Aware that certain medical conditions vitally effect, or even preclude, dental treatment.

Emphasize the possibility that certain manifestations in the oral cavity may not be dental problems per se; that medical conditions prescribed by a physician may precipitate certain dental abnormalities.

The student should be able to:

Recognize by sight, and describe the causes of, common abnormalities.

Instruction in this area is useful in patient education, radiography, and as background information.

◦ MICROBIOLOGY AND STERILIZATION

— History of Microbiology

Instruction should include this history, since a knowledge of how the causative agents of diseases were identified is necessary background information.

— Physical Characteristics of Microorganisms

Visual aids — especially the microscope and culture mediums — are very useful.

The student should be able to:
List, categorize, and describe by shape, the various microorganisms, and state the environment in which they are found.

— Transmission of Disease

Having each student take a culture medium of the normal flora of her mouth has excellent motivational value.

• Pathogens

The student should be:
Aware that a few groups of microorganisms produce disease.

• Spore formers

Aware that certain bacteria can survive unfavorable conditions by adopting a dormant, nearly impregnable form, until returned to favorable conditions.

Emphasize that microorganisms can exist in spore form for a considerable time.

• Toxin producers

Aware that it is not always the microorganism itself that is harmful, but frequently the substances produced by the microorganism.

• Modes of transmission

The student should be able to:
List and describe the various portals of entry of microorganisms into the body.

The student should be:

Aware of the different means of achieving a sterile condition.

The student should be able to:

State the particular method by which any teacher-selected object should be sterilized.

Demonstrate the operation of any sterilizing equipment commonly used in dental practice.

Describe by defining, the difference between germicides, disinfectants, and antiseptics.

Demonstrate the aseptic technique proper to any teacher-designated dental instrument, equipment, or material.

Demonstrate personal and patient-related aseptic techniques.

All safety procedures must be vigorously enforced.

Emphasize the importance of handscrubbing in view of the patient:

- 1) before any procedure,
- 2) after the procedure is completed,
- 3) at any time during a procedure that a possibly contaminated object is handled.

- Asepsis
 - . Germicides
 - . Disinfectants
 - . Antiseptics

o OFFICE MANAGEMENT

- Clerical Duties
- . Telephone techniques

The student should be able to:
Demonstrate approved methods of using the telephone.

Emphasize the importance of the telephone contact as setting the image of the office.

Demonstrate, by any teacher-selected means, good judgment in handling representative telephone situations.

Films and training aids are available without cost from the New York Telephone Company.

List the items of information which should be elicited from callers.

. Appointment control

The student should be:

Acquainted with the personal qualities necessary for appointment control responsibility.

The appointment control

responsibility requires considerable field experience and is, therefore, beyond the entry-level scope of this course. Students should, however, acquire an understanding of the requirements of the work.

The student should be able to:

List the items of information which must be recorded in the appointment book.

Complete an appointment schedule for one week's time, using any standard form and teacher-supplied patient data.

- . Receiving patients
- Scheduled
- Emergency treatment

Demonstrate ability to make the patient feel comfortable and of individual importance.

Emphasize the necessity of the dental assistant adapting to the personality of the individual patient.

Demonstrate a friendly, courteous, but business-like manner in receiving patients.

Demonstrate ability to diplomatically advance the treatment of unscheduled patients requiring immediate attention.

Recording patient data
Personal
Medical history
Treatment history

The student should be able to:
Differentiate between types of data by describing the information which each must contain.

Emphasize the critical importance of precise, accurate records.

. Filing
Active
Inactive
Closed
Patient recall

Demonstrate an ability to maintain efficiently, any standard system of filing.

Filing includes patient records, financial records, and patient recall.

. Inventory control

Demonstrate an ability to maintain an efficient inventory control system, and a satisfactory inventory.

Ordering supplies is an important function of the dental assistant.

— Bookkeeping
. Insurance forms

The student should be:
Acquainted with the characteristics of the various insurance forms.

The student should be able to:
Accurately prepare any teacher-selected insurance form.

. Billing
Due
Overdue

The student should be:
Acquainted with the various methods of handling financial accounts.

Proficiency in basic arithmetic is imperative.

The student should be able to:
Prepare a statement using teacher-supplied information.

- Finances
 - Receipts
 - Petty cash
 - Deposit slips
 - Checking account
 - Bank statements
 - Payroll

The student should be able to:

Process cash receipts, and record and post cash payments.

Record petty cash expenditures.

Prepare deposit slips.

Prepare checks for signature.

Maintain a correct balance.

Reconcile checkbook record with the bank statement.

Prepare payroll deduction forms.

Some dentists assign a dental assistant to the collection of data necessary for preparation of the Federal quarterly tax report. Instruction in this area is local option.

- Financial records

The student should be:

Acquainted with various time payment plans.

Acquainted with the day sheet, monthly summary, and yearly summary forms.

The student should be able to:

Keep a running balance of patient's treatment records.

Demonstrate ability to prepare day sheets, monthly summaries, and yearly summaries using teacher-supplied information.

It is strongly recommended that students of Dental Assisting complete the Business Education Program's course in Recordkeeping.

- Housekeeping
 - Climate control
 - Maintaining readiness
 - Safe conditions
 - Orderliness
 - Preparation for successive patients

The student should be:

Aware of the effects of relative humidity and ambient temperature upon patients, staff, equipment, and materials.

The student should be:

Acquainted with the duties of the dental assistant in preparing the physical plant for the day's activities, and for overnight.

The student should be able to:

List the activities which the dental assistant performs in readying the office or clinic for use.

List the areas to be observed for needed ongoing housekeeping.

List the activities which the dental assistant performs before closing the office for the night.

Responsibility for cleaning may be with the dental staff, with a building maintenance staff, or with an independent cleaning service. The dental assistant is, however, responsible for assuring that cleaning has been done.

o OFFICE FIRST AID

- Emergency Armamentarium
 - . Oxygen unit
 - . Ammonia ampules
 - . Kits

The student should be:

Acquainted with both built-in and portable oxygen units.

Acquainted with the nature and uses of various emergency kits.

The student should be able to:

Demonstrate proficient use of available oxygen equipment.

Use ammonia ampules in an approved manner.

Recognize by sight, any teacher-designated standard emergency kit.

- Procedures
 - Routine problems
 - Anxiety
 - Hemorrhaging
 - Nausea and vomiting
 - Syncope
- Exceptional problems
 - Epileptic seizures
 - Respiratory failure
 - Shock
 - Tachycardia

The student should be able to:
List the signs and symptoms indicative of each emergency problem.

The chief responsibility of the dental assistant is to recognize signs of imminent problems rather than to provide first aid *ex post facto*.

Describe the measures which the dental assistant would take to prevent onset of an emergency problem.

Describe the measures which the dental assistant may take in anticipating the dentist's needs, and in assisting the dentist in emergency problems.

◦ PREPARATION FOR EMPLOYMENT

- Field Experience
 - Assignment to dental office or clinic
- Seminar
 - Discussion and evaluation of field experience
- Job Applications
 - Forms
 - Résumé
 - Interview

Demonstrate at least entry-level proficiency as a dental assistant in actual service in a dental office or clinic.

Required evaluations of the student's field work by the cooperating dental staff, should be discussed with the student.

Demonstrate ability to communicate pertinent work experiences to the teacher and to classmates.

The student's personal impressions of the field experience should be related.

The student should be able to:

Complete teacher-supplied sample job application forms.

Compose a clear, concise, informative résumé.

Demonstrate proper conduct and attitude during role-play of a job interview.

RESOURCE LIST

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PERIODICALS

American Dental Directory. American Dental Association. Chicago.

Cal. Coe Laboratories, Inc. Chicago. Monthly.

The Dental Assistant. American Dental Assistants Association. Chicago.

The Journal of the American Dental Association. American Dental Assistants Association. Chicago.

CHARTS, POSTERS, PAMPHLETS

Why A Professional Prophylaxis? Proctor and Gamble.

FILM CATALOGS

Astra Film Library, Astra Pharmaceutical Products, Inc.

Health Films, New York State Department of Health.

Professional Services Division, Proctor and Gamble Corp.

U. S. Government Films — 1971 Supplement. National Audiovisual Center.

FILMS — 16mm

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